

REMARKS/ARGUMENTS

The present amendment is in response to the Office Action dated October 14, 2008. Applicants have also filed herewith a one-month extension of time.

Applicants filed an Information Disclosure Statement (IDS) on July 24, 2008, and the fee for this IDS on July 28, 2008. Applicants request that the Examiner acknowledge the references cited in the IDS, by returning to Applicants' undersigned representative a signed, initialed and dated copy of the corresponding PTO/SB/08 forms.

Claims 1-10 and 25-34 are pending in the present application. Claims 1 and 26 have been currently amended and new Claims 29-34 have been added. Claim 1 was amended by incorporating the limitation of Claim 11, and is supported on page 20 and Figure 3 of the specification. Amended Claim 26 is supported on pages 6 and 7 of the specification. Support for new Claims 29, 32 and 33 can be found on pages 7 and 8 of the specification. Support for new Claims 30, 31 and 34 can be found on pages 6-8 and 14-17 of the specification.

Claim Rejections under 35 U.S.C. § 102(e), and/or 35 U.S.C. § 103(a)

The Examiner rejected Claims 1, 2, 5-9, 11, 21-23, 25, 27 and 28 under U.S.C. § 102(e), as anticipated by, or, in the alternative, under 35 U.S.C. § 103(a), as obvious over, U.S. Publication No. 2003/0186039 (hereinafter the US'039 publication). Applicants respectfully traverse for the following reasons.

To support an anticipation rejection based on inherency, the Examiner must provide factual and technical grounds establishing that each inherent feature necessarily flows from the teachings of the prior art. See *Ex parte Levy*, 17 U.S.P.Q.2d, 1461, 1464 (Bd. Pat. App. & Int. 1990). See also MPEP 2131.01(III) (The evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and it would be so recognized by persons of ordinary skill (*Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991)).

The Examiner has not shown that each claim feature of Applicants' invention is expressly or inherently disclosed in the '039 publication. For example, the

Examiner has not shown that the geometric bending moments, grammage and maximum sheet curl values necessarily flow from, and/or are necessarily present in, the teachings of the US'039 publication. The Examiner has provided only speculation, without proof, that the geometric bending moments of Claims 1 and 2, the grammage of Claims 1 and 25, and the maximum sheet curl of Claim 5, are each inherently disclosed in the '039 publication. The Examiner has also conclusively stated, without providing proof, that the surface weight of a multilayer sheet is 220 g/m<sup>2</sup>. The Examiner has not shown that the sheets disclosed in '039 contain a foam layer with a density greater than 0.25 g/cc, in combination with the additional features of Claim 1.

Therefore, for at least the above reasons, the US'039 publication does not teach or suggest the invention as claimed. Applicants request the withdrawal of this rejection.

The Examiner rejected Claims 3, 4, 10, 24 and 26 under 35 U.S.C. § 103(a), as unpatentable over the US'039 publication, as applied to Claim 1, and in further view of U.S. 5,506,046 (hereinafter the US'046 patent). Applicants respectfully traverse for the following reasons.

For at least the above reasons, the US'039 publication does not teach or suggest the invention as claimed. In addition, the US'039 publication is directed to sheets for thermoforming applications, and there is no motivation disclosed in the US'039 publication to prepare creased multilayer sheets. The US'046 patent does not overcome the deficiencies of the US'039 publication. Applicants request the withdrawal of this rejection.

The Examiner rejected Claims 1, 2, 5-9, 21-23, 25, 27 and 28 under 35 U.S.C. § 103(a), as unpatentable over U.S. Publication No. 2002/0035164 (hereinafter the US'164 publication), in view of the US'039 publication. Applicants respectfully traverse for the following reasons.

The US'164 publication does not teach or suggest the invention as claimed. This publication is directed to rigid foam, polypropylene sheet (for example, see

abstract, paragraph [0013], and experimental examples). All of the examples are monolayer foams (one layer), which fall outside the scope of the pending claims, which require sheets containing at least two layers. This publication teaches that a sheet may have a very thin surface layer having a thickness to core thickness ratio of 1/1000, and preferably 1/2000 (see paragraph [0057]), which is also outside the scope of the pending claims.

The Examiner has argued that it would have been obvious to add 10-40 weight percent filler (as claimed) to the non-foam layer of the sheets of the US'164 to improve the flexural rigidity of these sheets, without increasing the basis weight of these sheets. However, one of ordinary skill in the art would appreciate that such levels of filler would increase the basis weight of the sheet since a filler would have a higher density than the polymer used to form the sheet. Thus, contrary to the Examiner's assertion, there is no motivation to add 10-40 weight percent filler to the non-foam layer of a US'164 sheet, and such an addition is not obvious.

In addition, Examples 7-12 (see Table IV) have grammage values ranging from 543 g/m<sup>2</sup> to 891 g/m<sup>2</sup>, which are outside the scope of the pending claims. Applicants have discovered that a Grammage value between 100 and 500 provides a good compromise between structural stability requirements and the cost of manufacture. Also, the combination of Grammage and Geometric Mean Bending Moment, as claimed, allows the inventive sheets to be useful in carton board conversion machines (see pages 3 and 5 of the present application).

The US'164 publication does not teach or suggest the combination of features in Claim 1. The US'039 publication does not overcome the deficiencies of the '164 publication.

For at least these reasons, the US'164 publication, in view of the US'039 publication, does not teach or suggest the invention as claimed. Applicants respectfully request the withdrawal of this rejection.

The Examiner rejected Claims 3, 4, 10, 24 and 26 under 35 U.S.C. § 103(a), as unpatentable over the US'164 publication, in view of the US'039 publication, as

applied to Claim 1, and in further view of JP 2001-226509 (hereinafter the JP'509 reference). Applicants respectfully traverse for the following reasons.

As discussed above, the US'164 publication, in view of the US'039 publication, does not teach or suggest pending Claim 1. The JP'509 reference does not overcome the deficiencies of these references. The Examiner argued it would have been obvious to take a sheet of US'164 and form multiple score lines in the sheet so that the sheet can be formed into a container. The Examiner has also argued that it would have been obvious to score the sheets of US'164 with a score depth as claimed, to increase the range of bending motion, without easily tearing the score. However, the US'164 publication is directed to rigid foamed polypropylene sheets with high tensile moduli, generally above 1000 MPa (see paragraph [0053] of US'164). One of ordinary skill in the art will recognize that as the rigidity of a sheet is increased, the tendency for the sheet to snap, instead of bend, also increases. One skilled would also recognize that the rigid, high modulus sheets disclosed in the US'164 publication would snap, instead of bend, long a score line. Thus, contrary to the Examiner's assertion, there is no motivation disclosed in the US'039 publication to prepare creased multilayer sheets.

Therefore, for at least these reasons, the '164 publication, in view of the US'039 publication and the JP'509 reference, does not teach or suggest the invention as claimed. Applicants request the withdrawal of this rejection.

The Examiner rejected Claims 1-11 and 21-28 under 35 U.S.C. § 103(a), as unpatentable over U.S. Publication No. 2005/0159496 (hereinafter the US'496 publication), in view of the JP'509 reference. Applicants respectfully traverse for the following reasons.

To support an anticipation rejection based on inherency, the Examiner must provide factual and technical grounds establishing that each inherent feature necessarily flows from the teachings of the prior art. See *Ex parte Levy*, 17 U.S.P.Q.2d, 1461, 1464 (Bd. Pat. App. & Int. 1990). See also MPEP 2131.01(III) (The evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and it would be so recognized by

persons of ordinary skill (*Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991)).

The Examiner has not shown that each claim feature of Applicants' invention is expressly or inherently disclosed in the '496 publication. For example, the Examiner has not shown that the geometric bending moments, grammage and maximum sheet curl values necessarily flow from, and/or are necessarily present in, the teachings of the US'496 publication. The Examiner has provided only speculation, without proof, that the geometric bending moments of Claims 1 and 2, the grammage of Claims 1 and 25, and the maximum sheet curl of Claim 5 are each inherently disclosed in the US'496 publication. Also, neither reference teaches or suggests the bending force, crease depth or combination thereof as claimed.

Therefore, for at least the above reasons, the US'496 publication, in view of the JP'509 reference, does not teach or suggest the invention as claimed. Applicants request the withdrawal of this rejection.

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Respectfully submitted,

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